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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,055	04/18/2001	Masahide Hirasawa	B208-1132	9180

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EXAMINER
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SHAW, PELING ANDY

ART UNIT	PAPER NUMBER
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2144

MAIL DATE	DELIVERY MODE
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09/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/837,055	<b>Applicant(s)</b> HIRASAWA, MASAHIRO	
	<b>Examiner</b> PELING A. SHAW	<b>Art Unit</b> 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,10,11,15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,10,11,15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/30/2008 has been entered. Claims 1, 10-11, 15, 18 and 20 are amended. The change to the specification, i.e. Abstract, is reviewed and accepted. Claims 1, 10-11, 15 and 18-21 are currently pending.
2. Amendment received on 12/31/2007 was entered into record. Claims 1, 10-11 and 15 were amended. Claims 2-3 and 12-13 were cancelled. Claims 18-21 were new.
3. Applicant's submission filed on 07/20/2007 was entered. Claims 1 and 11 were amended. Claims 16-17 were cancelled.
4. Amendment received on 01/04/2007 was entered into record. Claims 1-2 and 11-12 were amended. Claims 16-17 were new.
5. Applicant's submission filed on 06/26/2006 was entered. Claims 1-3, 11-13 and 15 were amended. Claims 7 and 14 were cancelled.
6. Amendment received on 12/12/2005 was entered. Claims 1-3, 7 and 10 were amended. Claims 4-6 and 8-9 were cancelled. Claims 11-15 were new.

### ***Priority***

7. This application has claimed priority on JAPAN 119029/2000 04/20/2000. The filing date is 04/18/2001.

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***Claim Rejections - 35 USC § 112, first paragraph***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 19 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the original specification and claims in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

- a. Claims 19 and 21 have used the term of “connection unit” that is not found in applicant’s original specification or claim language. The closest term exists in applicant’s original specification or claim language to this term of “connection unit” is “port”. Since there is no usage of “connection unit” and the term could be interpreted beyond the term of “port”, these usages of “connection unit” still modify the scope of the invention and introduce new subject matter into the application. It would require undue experimentation for one of ordinary skill in the networking art at the time the invention was made to be able to add and test all these functions inclusively rather than just pick a particular function for implementation. Claims 19 and 21 are thus rejected. For the purpose of applying art, the term of “connection unit” is read as “port” with the consideration of the context of “port”.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 10-11, 15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seong (US 6785720 B1), hereinafter referred as Seong in view of Takayama (US 5991842 A), hereinafter referred as Takayama.

- a. Seong shows (claim 1) a communication control apparatus (column 1, lines 21-26: set-top box) comprising: a first port which connects to said first segment of a network (column 1, lines 46-53: connection between devices); a second port which connects to said second segment of a network (column 1, lines 46-53: connection between devices); a CIP header detecting unit adapted to detect whether an isochronous packet received by said first port includes a CIP (common isochronous packet) head conforming to IEC 61883 standard (Fig. 1-3; column 1, line 46-column 2, line 10: IEC 61833 over IEEE 1394 to provide control and connection management of A/V using IPCR and OPCR, IEC 61883 define CIP header structure, CIP header has information on source stream); and a control unit configured to determine, using the CIP header, whether to disable relaying the isochronous packet including the CIP header to said second port (column 5, lines 47-67: OPCR to control the channel; Fig. 6-7; column 4, line 65-column 5, line 6: power on/off), wherein said control unit

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controls to provide the isochronous packet including the CIP header to said second port, if the CIP header includes a node ID of a permission node (column 4, lines 29-56: set-top box is to select the service (source) device for connection; column 2, lines 42-49: CIP header contain source stream information; Fig. 8, column 5, lines 12-67: storing server device ID information for connections), and wherein said control unit controls to provide another isochronous packet to said second port in lieu of the isochronous packet including the CIP header (column 1, lines 24-53; IEEE 1394 transport digital stream), if said control unit determines that relaying the isochronous packet received by said first connection unit to said second connection unit is disabled if the CIP header includes a node ID of a prohibited node (column 1, lines 46-53: securing connection between devices for transmitting and receiving A/V data; column 5, lines 47-67: OPCR to control the channel; column 5, lines 30-67: server device not register, server device inactive). Seong does not explicitly show wherein said control unit controls to provide another isochronous packet including dummy data or null. However, Seong does show transmitting according to IEEE 1394/IEC 61883.

- b. Takayama shows (column 9, lines 47-49) when equipment is under operation, an empty packet is transmitted even if there is no data to be transmitted in an analogous art for the purpose of providing digital data transfer, electronic equipment for transferring data using the communication system, and an interface control device.
- c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Seong's functions of connecting server device over

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- IEEE 1394 using IEC 61883 with Takayama's functions of transmitting dummy packet when there is no data to be transmitted.
- d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to transmitting dummy packet as per Takayama's teaching in as applied in IEEE 1394 isochronous channel connection based device connection in home network application as per Takayama (column 1, lines 21-35) and Seong (column 1, lines 24-53)'s teaching.
  - e. Regarding claim 10, Seong shows wherein said first and second ports conform to the IEEE 1394-1995 standard (Fig. 1-3; column 1, line 46-column 2, line 10: IEC 61833 over IEEE 1394).
  - f. Regarding claim 18, Seong shows wherein said control unit enables relaying the isochronous packet to said second port, if the isochronous packet does not include the CIP header (column 1, lines 46-53: it is not enough to perform data transmission between devices with only an IEEE 1394 specification. Namely, rules with respect to processes of securing a connection between devices for transmitting and receiving A/V data and an isochronous channel for transmitting the A/V data should be established between devices. For this, an IEC 61883 specification exists; column 2, lines 42-49: CIP is used to implement IEC 61883 functions).
  - g. Regarding claim 19, Seong shows wherein said control unit detects a node ID of a source node from the CIP header in order to determine whether to disable relaying the isochronous packet received by said first connection unit to said second connection unit (Fig. 5; column 4, lines 29-56: under conditions, connection to set-top box is

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performed; column 4, line 57-column 5, line 6: source device and POWER ON and POWER OFF).

- h. Claims 11, 15 and 20-21 are of the same scope as claims 1, 10 and 18-19. There are rejected for the same reasons as for claims 1, 10 and 18-19.

Together Seong and Takayama disclosed all limitations of claims 1, 10-11, 15 and 18-21.

Claims 1, 10-11, 15 and 18-21 are rejected under 35 U.S.C. 103(a).



***Response to Arguments***

10. Applicant's arguments filed on 06/30/2008 have been fully considered, but they are not persuasive.

- a. Applicant has amended independent claims 1 and 11 with the emphasis on the relaying isochronous packets is based upon a node ID in CIP header. Examiner has looked up in Chou et al. (US 6363428 B1) and found that applicant's node ID is sourceID in CIP header. Examiner has further reviewed IEC 61883-1, an IDS item and found extensive similar description on connection management functions as disclosed in Seong, particularly using IPCR and OPCR to register how connections is to be done on a IEEE 1394/IEC 61883 transmission device. As references cited from Seong in showing various functions in setting up connections based IEEE 1394/IEC 61883 standard, both IEC 61883-1 and Seong seem to suggest that the routing an incoming IEEE 1394/IEC 61883 data packet is further limited by the connection management as per IEC 61883. As Seong has described selecting Source for transmission per Fig. 5, 8 and related sections from Seong's specification, Seong seems to teach or suggest the argued limitation, i.e. connecting base on a node ID in CIP or sourceID in CIP. As one skill in the art would read Seong and IEC 61883-1 and recognize that the sourceID would be used for lookup in a connection management for determining if a transmission would be succesful from one end point of IEEE 1394 to another end point using the connection management specification from IEC 61883-1. Here IEC 61883-1 is really on network layer protocol functions.

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IEEE 1394 is on transport layers protocol function. Thus either Seong or IEC 61883-1 seems to have all the limitations of applicant's claimed invention.

- b. It is the Examiner's position that Applicant has not submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art (see items a-d in section 10). As the claimed invention seems to draw a direct interpretation what has to be done according to and thus conforming industrial standards as applied to specific application. The cited prior art has also shown teaching or suggesting all limitation as claimed. It is not clear how applicant is able to submit claim language to distinguish over the prior arts used in the above rejection sections that discloses distinctive features of Applicant's claimed invention. If applicant is submitting further amendment or argument, it is suggested that Applicant looks into the original specification and claim language and compared with the cited prior art used in the rejection section above or the Remark section below to draw an amended claim set to further the prosecution.
- c. Failure for Applicant to narrow the definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant's intent to broaden claimed invention. Examiner interprets the claim language in a scope parallel to the Applicant in the response.

***Remarks***

11. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

- a. Chou et al. (US 6363428 B1) Apparatus for and method of separating header information from data in an IEEE 1394-1995 serial bus network
- b. Gerszberg et al. (US 6396531 B1) Set top integrated visionphone user interface having multiple menu hierarchies
- c. Stallkamp (US 6522649 B1) Method of distributing video reference signals as isochronous network packets
- d. IEC 61883-1, Consumer audio/video equipment-digital interface-Part 1: General, First edition, 1998-02, pp.1-77
- e. Hollins (US 7023801 B1) Speculative packet selection for transmission of isochronous data
- f. Johnson et al. (US 5584039 A) System for coordinating execution of multiple concurrent channel programs without host processor involvement using suspend and resume commands to control data transfer between I/O devices

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***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peling A Shaw/  
Examiner, Art Unit 2144